

A taxonomic study of the genus *Erianthella* Descamps, 1975 (Orthoptera, Eumastacoidea, Chorotypidae) with descriptions of two new species from China

YIN Xiang-Chu^{1,2,3,*}, ZHENG Fang-Qiang², YIN Zhan¹

(1. College of Life Sciences, Hebei University, Baoding, Hebei 071002, China;
2. College of Plant Protection, Shandong Agricultural University, Taian, Shandong 271018, China;
3. Northwest Plateau Institute of Biology, Chinese Academy of Sciences, Xining, Qinghai 810001, China)

Abstract: Three species of the genus *Erianthella* Descamps, 1975 are described and illustrated, including two new species *Erianthella lini* sp. n. and *Erianthella chani* sp. n. The new species *E. chani* sp. n. is similar to *E. formosana* Shiraki, 1910, but differs from the latter by the R vein of tegmen with 1 branch, M area of tegmen with intercalary vein, and tegmen with 1 small white spot. The new species *E. lini* sp. nov. is similar to *E. chani* sp. nov., but differs from the latter by the R vein of tegmen without branch, M vein of tegmen with 3 branches, and M area of tegmen without intercalary vein. A key to species of the genus is given.

Key words: Orthoptera; Eumastacoidea; Chorotypidae; *Erianthella*; new species; China

The genus *Erianthella* was erected by Descamps in 1975, belonging to superfamily Eumastacoidea, family Chorotypidae, subfamily Erianthinae, only one species in the world, *i. e.*, type species: *Erianthella formosana* Shiraki, 1910 [= *Erianthus formosana* Shiraki, 1910] distributed in Taiwan, China (Descamps, 1975; Eades *et al.*, 2012). During the identification of grasshopper specimens collected from Taiwan, two new species of the genus were found and described below. A key to species of the genus is given.

Descriptions and measurements were made under a stereomicroscope (Leica M 205 A, LAS V 4.0). All figures were made with a Canon 5D Mark II and Adobe Photoshop version 9.0 software. Additional sources for the description of sculpture (Descamps, 1975). The following abbreviations are used for morphology: R, radial vein; M, median vein; I, intercalary vein; AL, apical lobe of 10th abdominal tergite.

Type specimens and other materials are deposited in the National Museum of Natural Science, Taichung and Department of Entomology, Taiwan University, Taiwan, China.

Genus *Erianthella* Descamps, 1975

Descamps. 1975. *Ann. Soc. Ent. Fr. Nouvelle série*, 11

基金项目: 国家自然科学基金项目(31272293)

作者简介: 印象初, 男, 1934年生, 江苏海门人, 教授, 从事蝗虫分类研究, E-mail: yxch@hbu.edu.cn

* 通讯作者 Corresponding author, E-mail: yxch@hbu.edu.cn

收稿日期: 2012-06-21; 接受日期 Accepted: 2012-08-07

(1): 111; Otte, D. 1994. Orthoptera Species File. 2: 8; Yin, Shi, Yin, 1996. *Synonymic Catalogue of Grasshoppers and Their Allies of the World (Orthoptera: Caelifera)*. 791; Huang *et al.*, 2009. *Journal of Guangxi Normal University (Natural Science Edition)*, 27(1): 84–87.

Type species: *Erianthella formosana* (Shiraki, 1910) = *Erianthus formosanus* Shiraki. 1910.

Head higher than pronotum distinctly. Antennae shorter than fore femur, filiform, not more than 14 segments. Tegmina and wings developed, apex truncate. Spines of internal margin of caudal tibiae biseriate in length and 10th abdominal tergite of male with two long and broad apical lobes.

The genus is allied to *Erianthus* Stål, 1875, but differs from the latter by the 10th abdominal tergite of male with two long and broad apical lobes.

1. *Erianthella formosana* (Shiraki, 1910) (Figs. 1–2)

Erianthus formosanus Shiraki, 1910. *Acrididen Japans*. 83; Karny, 1915. *Supplementa Entomologica*, 4: 82; Bolívar, 1930. *Trab. Mus. Cienc. Nat.*, Madrid (Ser. zool.), 46: 114; Descamps, 1974. *Bull. Mus. Natn. Hist. Nat. Paris (Zool. 3e ser)*, 237 (11): 1036.

Erianthella formosana: Descamps. 1975. *Ann. Soc. Ent. Fr. Nouvelle série*, 11(1): 111; Huang *et al.*, 2009. *Journal of Guangxi Normal University (Natural Science Edition)*, 27(1): 84–87.

Location of type specimens: Shiraki Collection, syntypes, 3♂♂.

Materials examined: Department of Entomology,

ACKNOWLEDGEMENTS This study is financially supported by the grants of National Natural Science Foundation of China (No. 31272293). We are grateful to Prof. Yien-Shing Chow, the former Director of National Museum of Natural Science, Taichung, for his kind invitation to visit Taiwan, China. We are also grateful to Prof. Lin Cheng-Shing and Ms. Chan Mei-Ling for collecting type specimens.

References

- Bolívar C, 1930. Monografía de los Eumastacidos (Orth. Acrid.). *Trab. Mus. Cienc. Nat., Madrid (Ser. zool.)*, 46: 114.
- Descamps M, 1974. Diagnoses et Signalisations d'Eumastacoidea (Orthoptera). II. Indo-Malaisie. *Bull. Mus. Natn. Hist. Nat. Paris (Zool. 3e ser.)*, 237(11): 1036.
- Descamps M, 1975. Revision du genre *Erianthus* Stål, 1875 (Orth. Eumastacoidea, Erianthinae). *Ann. Soc. Ent. Fr. Nouvelle série*, 11(1): 91–136.
- Eades DC, Otte D, Cigliano MM, Braun H, Orthoptera Species File Online. Version 2. 0/4. 0. [2012. 2]. <http://Orthoptera.SpeciesFile.org>.
- Huang JH, Huang Y, Zhou SY, 2009. Check list of Chinese species of superfamily Eumastacoidea (Orthoptera: Caelifera). *Journal of Guangxi Normal University (Natural Science Edition)*, 27(1): 84–87.
- Karny H, 1915. Sauter's Formosa-Ausbeute. Orthoptera et Oothecaria. *Suppl. Ent.*, 4: 82.
- Otte D, 1994. Orthoptera Species File. 2: 8.
- Shiraki T, 1910. Acridiiden Japans. Keiseisha, Tokyo 1–90, 2 pls.
- Yin XC, Shi JP, Yin Z, 1996. A Synonymic Catalogue of Grasshoppers and Their Allies of the World. China Forestry Publishing House, Beijing. 791.

中国小乌蟠属的分类研究及二新种记述 (直翅目, 蟠总科, 脊蟠科)

印象初^{1,2,3,*}, 郑方强², 印展¹

(1. 河北大学生命科学学院, 河北保定 071002; 2. 山东农业大学植物保护学院, 山东泰安 271018;
3. 中国科学院西北高原生物研究所, 西宁 810008)

摘要: 本文对中国小乌蟠属 *Erianthella* Descamps, 1975 进行了分类研究, 记述 3 种, 含 2 个新种——詹氏小乌蟠 *Erianthella chani* sp. n. 和林氏小乌蟠 *Erianthella lini* sp. n. 并编制了该属的种检索表。新种模式标本保存于我国台湾国立自然博物馆。

关键词: 直翅目; 蟠总科; 脊蟠科; 小乌蟠属; 新种; 中国

中图分类号: Q969 文献标志码: A 文章编号: 0454-6296(2013)12-1464-05

附录: 新种简记

1. 詹氏小乌蟠, 新种 *Erianthella chani* sp. nov. (图 3~7)

该新种同台湾小乌蟠 *E. formosana* (Shiraki, 1910) 近似, 不同之处为前翅 R 脉 1 个分支, 前翅中脉域具闰脉, 前翅具 1 个白色小斑。

体长: ♂ 18.1 mm。前胸背板长: ♂ 3.2 mm。前翅长: ♂ 12.8 mm。后足股节长: ♂ 11.8 mm。

正模: ♂, 台湾: 高雄, 2000-VII-6~7, 詹美铃采。

雌性不知。

词源: 本新种名 *chani* (詹氏), 为了感谢詹美铃女士采集模式标本而命名。

2. 林氏小乌蟠, 新种 *Erianthella lini* sp. nov. (图 8~11)

该新种同詹氏小乌蟠 *Erianthella chani* sp. n. 近似, 不同之处为前翅 R 脉不分支, 前翅中脉具 3 个分支, 前翅中脉域缺闰脉。

体长: ♂ 17.8 mm。前胸背板长: ♂ 3.0 mm。前翅长: ♂ 13.5 mm。后足股节长: ♂ 11.2 mm。

正模: ♂, 台湾: 高雄, 1995-VI-21~24, 林政行、詹美铃采。

雌性不知。

词源: 本新种名 *lini* (林氏), 为了感谢林政行教授采集模式标本而命名。

(责任编辑: 袁德成)